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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/784,733

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David C. Deaville

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EXAMINER

MCCLAIN, GERALD

ART UNIT

PAPER NUMBER

3653

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/784,733

Applicant(s)

DEAVILLE ET AL.

Examiner

Gerald W. McClain

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9 May 2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 13 and 25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 20 December 2006.

### ***Drawings***

The drawings were received on 26 May 2004. These drawings are acceptable.

### ***Claim Objections***

Claims 15-20 and 23-24 (and 25) are objected to because of the following informalities: the referred apparatus claim should be claim 14, not claim 13. Appropriate correction is required.

Claims 16-17 are objected to because of the following informalities: in lines 4 and 5, respectively, "is" should be removed. Appropriate correction is required.

Claim 17 is objected to because of the following informalities: in line 4, the comma should be removed to be consistent with the other claims (example: claim 15). Appropriate correction is required.

Claim 22 is objected to because of the following informalities: in line 1, the last instance of the word "the" should be removed. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4-9, 12, 14-21, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "abnormal" in claims 1, 4-9, and 14-20 a relative term which renders the claims indefinite. The term "abnormal" is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claims 1 and 12 recite the limitation "sensed signals" in multiple instances. There is insufficient antecedent basis for this limitation in the claims.

Claims 14 and 23 recite the limitation "signals" in line 10 and line 2, respectively. There is insufficient antecedent basis for this limitation in the claims. Which of the previous "signals" is this? Is it a different signal?

Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: when does the "document stacking operation" in line 3 occur? Is it the same "document stacking operation" as in claim 14, line 9, or a different operation?

Claim 20 recites the limitation "sensed values" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 21 recites the limitation "electric signals" in line 1. There is insufficient antecedent basis for this limitation in the claim. Is this the signal of claim 14, from claim 21, or another signal?

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 and 14-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al. (U.S. 4,678,072) ("Kobayashi").

Claim 1: sensing electric signals from the actuator (M2) during a document stacking operation and determining whether an abnormal event has occurred based on the sensed signals (column 4, lines 37-61);

Claim 2: operating the actuator to store a document in a cassette (column 4, lines 37-61);

Claim 3: operating the actuator to cause movement of a piston to store a document in a cassette (column 4, lines 37-61);

Claim 4: sensing electric signals includes sensing values indicative of actuator load and wherein determining whether an abnormal event has occurred includes

Art Unit: 3653

comparing an amount of time that has elapsed between specified sensed values of actuator load to a predetermined amount of time (column 4, lines 37-61);

Claim 5: identifying an amount of time that has elapsed from a specified point in the stacking operation to a peak value of actuator load, wherein determining whether an abnormal event has occurred is based on the identified amount of time (column 4, lines 37-61);

Claim 6: identifying an amount of time that has elapsed from a specified point in the stacking operation to a predetermined threshold value of actuator load, wherein determining whether an abnormal event has occurred is based on the identified amount of time (column 4, lines 37-61);

Claim 7: sensing electric signals includes sensing signals indicative of actuator load and wherein determining whether an abnormal event has occurred includes comparing an actual profile of the actuator load with an expected profile (column 4, lines 37-61);

Claim 8: sensing electric signals includes sensing signals indicative of actuator load, wherein the method includes integrating the actuator load for a specified period of time during a document stacking operation to obtain an integrated, wherein determining whether an abnormal event has occurred is based on the integrated value (column 4, lines 37-61);

Claim 9: determining whether an abnormal event has occurred includes comparing at least one value derived from the sensed values to at least one reference value (column 4, lines 37-61);

Claim 10: the sensed values are indicative of actuator load (column 4, lines 37-61);

Claim 11: adjusting the at least one reference value based on previously sensed values of actuator load (column 4, lines 37-61);

Claim 12: using the sensed signals to determine whether a document cassette is full or the stacker is jammed (column 4, lines 37-61);

Claim 14: cassette (12); piston (11); actuator (M2); first circuitry (column 4, lines 48-51); signals (column 4, lines 48-51); second circuitry (RPG);

Claim 15: first circuitry (column 4, lines 48-51); signals (column 4, lines 48-51); actuator load (column 4, lines 48-51); second circuitry (RPG); amount of time (column 4, line 55); values (column 4, lines 52-58);

Claim 16: first circuitry (column 4, lines 48-51); signals (column 4, lines 48-51); actuator load (column 4, lines 48-51); second circuitry (RPG); amount of time (column 4, line 55); peak value (column 4, lines 52-58);

Claim 17: first circuitry (column 4, lines 48-51); signals (column 4, lines 48-51); actuator load (column 4, lines 48-51); second circuitry (RPG); specified point (column 4, line 55); threshold value (column 4, lines 52-58);

Claim 18: first circuitry (column 4, lines 48-51); signals (column 4, lines 48-51); actuator load (column 4, lines 48-51); second circuitry (RPG); actual profile (column 4, lines 52-58); comparison (column 4, lines 52-58);

Claim 19: first circuitry (column 4, lines 48-51); signals (column 4, lines 48-51); actuator load (column 4, lines 48-51); second circuitry (RPG); period of time (column 4, line 55); integrated value (column 4, lines 52-58);

Claim 20: second circuitry (RPG); value (column 4, lines 48-51); sensed values (column 4, lines 48-51); reference value (column 4, line 50);

Claim 21: electrical signals (column 4, lines 48-51); actuator load (column 4, lines 48-51);

Claim 22: second circuitry (RPG); reference value (column 4, line 50); values (column 4, lines 52-58); actuator load (column 4, lines 48-51);

Claim 23: second circuitry (RPG); signals (column 4, lines 37 and 48-51); actuator (M2); cassette (12); stacker (7).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Schoon et al. (U.S. 5,782,469) ("Schoon"). Kobayashi teaches all the limitations of the claims as discussed above. Kobayashi does not directly show a direct current motor.



Schoon shows a similar device having a direct current motor (75) for the purpose of preventing damage to the equipment and labels (column 4, lines 25-26). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention to have modified Kobayashi to include a direct current motor, as taught by Schoon, for the purpose of preventing damage to the equipment and labels.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald W. McClain whose telephone number is (571) 272-7803. The examiner can normally be reached on Monday through Friday from 7:30 a.m. to 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Art Unit: 3653

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gerald W. McClain  
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